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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/554,219	08/14/2000	Kunio Ninomiya	43890-416	6492

7590 05/20/2004  
McDermott Will & Emery  
600 13th Street NW  
Washington, DC 20005-3096

EXAMINER

NATNAEL, PAULOS M

ART UNIT PAPER NUMBER

2614

DATE MAILED: 05/20/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/554,219

Applicant(s)

NINOMIYA ET AL

Examiner

Paulos M. Natnael

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 2,3,5,6,8 and 11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2,3,5,8 and 11 is/are allowed.
- 6) ☒ Claim(s) 6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Applicant's arguments concerning the reference of Bouillet et al. are acceptable, and consequently the rejection has been withdrawn.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by **Muto**, U.S. Pat. No. 5,113,415.

Considering claim 6, A digital broadcast demodulator for receiving digital broadcast by transmitting digital video and audio information coded by digital VSB modulation system in packet format, wherein a differential value of synchronous signals of reception packet data is determined so as to detect a clock phase error of transmission data, and a clock signal is regenerated by phase control on the basis of the clock phase error, the digital demodulator further comprising:

(a) a subtracting circuit for subtracting the N-th input from the N+1th input of all reception data, is met by the subtractor 52, which subtracts the delayed and un-delayed output signals from the amplitudes to phase processor 48, Fig.7; (col. 11, lines 3-14)

(b) a circuit for outputting the subtraction input value obtained in the step above, only for the data coinciding with a code pattern of segment synchronous signal, is met by comparator ckt 55, Fig. 7;

(c) a circuit for outputting the subtraction input value obtained in step (b) as a clock phase error signal only for the data positioned at the segment synchronous signal, is also met by the comparator ckt 55, fig.7; (see also col. 11, lines 28+)

***Allowable Subject Matter***

3. Claims **2,3,5,8, and 11** are allowable over the prior art.
4. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to disclose a digital broadcast demodulator comprising a synchronous code pattern detecting circuit for detecting the segment synchronous code pattern from the most significant bit signal of the reception packet data, a symbol number counter for counting the number of symbol data in the reception packet data, a synchronous detection circuit for judging the true segment synchronous code pattern by obtaining the segment synchronous code pattern from said synchronous code pattern detecting circuit when said symbol number counter finishes counting of a specified number, and a synchronism detection protection counter for detecting and establishing the segment synchronous signal in the reception data from the output of said


synchronous code pattern detecting circuit and count-up of specified number of said symbol number counter, as in claim 2;

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (703) 305-0019. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**PAULOS M. NATNAEL**  
**PATENT EXAMINER**

PMN  
May 11, 2004